Code changes Recommended Based on Interpretation Requests from NEEC/Pierce County

14-14: Definition, Refrigerated Warehouse Cooler.

REFRIGERATED WAREHOUSE COOLER. An enclosed storage space that has a total chilled storage area of 3,000 ft² or greater and eapable of being refrigerated is designed to maintain a temperatures above of greater than 32°F but less than 55°F that can be walked into and has a total chilled storage area of 3,000 ft² or greater.

REFRIGERATED WAREHOUSE FREEZER. An enclosed storage space that has a total chilled storage area of 3,000 ft² or greater and is designed to maintain a temperature capable of being refrigerated to temperatures at or below 32°F that can be walked into and has a total chilled storage area of 3,000 ft² or greater.

14-17/14-18: Section C402.4.5.2 Outdoor air intakes and exhausts; Section C403.2.4.4 Shutoff damper controls. Modify language to coordinate language with damper class rating, application.

C402.4.5.2 Outdoor air intakes, and exhaust outlets, relief outlets and return openings. Outdoor air supply, exhaust openings and relief outlets shall be provided with Class IA motorized dampers which close automatically when the system is off. Return air dampers shall be equipped with motorized dampers. Dampers shall have a maximum leakage rate of 4 cfm/ft^2 (20.3 L/s × m²) at 1.0 inch water gauge (w.g.) (249 Pa) when tested in accordance with AMCA 500D.

Return air openings used for airside economizer operation shall be equipped with Class I motorized dampers. Dampers shall have a maximum leakage rate of 4 cfm/ft² (20.3 L/s m²) at 1.0 inch water gauge (w.g.) (249 Pa) when tested in accordance with AMCA 500D.

See also Section C403.2.4.4 for additional requirements for damper shut off controls.

Exceptions:

- Gravity (nonmotorized) dampers having a maximum leakage rate of 20 cfm/ft² (101.6 L/s × m²) at 1.0 inch water gauge (w.g.) (249 Pa) when tested in accordance with AMCA 500D are permitted to be used for relief openings in buildings less than three stories in height above grade if equipment has less than 5,000 cfm total supply flow.
 - **2.**Gravity (nonmotorized) dampers for ventilation air intakes shall be protected from direct exposure to wind.
- 3.2. Gravity dampers smaller than 24 inches (610 mm) in either dimension shall be permitted to have a leakage of 40 cfm/ft² (203.2 L/s × m²) at 1.0 inch water gauge (w.g.) (249 Pa) when tested in accordance with AMCA 500D.
- 3. Gravity (nonmotorized) dampers in Group R occupancies where the design outdoor air intake or exhaust capacity does not exceed 400 cfm (189 L/s).
- 4. The motorized dampers on return air openings in unitary packaged equipment that have the minimum leakage rate available from the manufacturer shall be deemed to comply.

C403.2.4.4 Shutoff damper controls. Both outdoor air supply and exhaust ducts shall be equipped with motorized dampers that will automatically shut when the systems or spaces served are not in use or during building warm-up, cooldown, and setback.

<u>See also Section C402.4.5 for additional damper requirements and maximum leakage rates.</u>

Exceptions:

- 1. Gravity relief dampers serving systems less than 5,000 cfm total supply shall be permitted in buildings less than three stories in height.
- 2. Gravity dampers shall be permitted for buildings of any height located in Climate Zones 1, 2 and 3.
- 3. Gravity (nonmotorized) dampers in Group R occupancies where the design outdoor air intake or exhaust capacity does not exceed 400 cfm (189 L/s).
- 4. Systems serving areas which require continuous operation.
- 5. Combustion air intakes.
- 6. Operation of dampers shall be allowed during ventilation prepurge one hour before expected occupancy and for unoccupied period precooling during the cooling season.
- 7. Dampers are not required in systems where specifically prohibited by the *International Mechanical Code*.